

WHAT IS CLAIMED IS:

1. A semiconductor device, comprising:
a semiconductor element;
a plurality of lead wires connected to a plurality
5 of connecting electrodes of said semiconductor element;
at least a single dummy lead wire that does not
include an outer lead portion for electrically
connecting said semiconductor element to an external
circuit of said semiconductor element;
10 an insulating film having an opening portion for
accommodating said semiconductor element and serving
to support said lead wires connected to the connecting
electrodes of the semiconductor element and said dummy
lead wire; and
15 a resin molding covering the connecting portion
between the tip portions of the lead wires and the
connecting electrodes and the tip portion of said dummy
lead wire within the opening portion of said insulating
film.
20 2. The semiconductor device according to claim 1,
wherein the tip portion of the dummy lead wire covered
with said resin molding is positioned between the
peripheral portion of said opening portion and the
peripheral portion of the semiconductor element
25 arranged within the opening portion.
3. The semiconductor device according to claim 1,
wherein the tip portion of said dummy lead wire extends

5

10

15

20

25

9. The semiconductor device according to claim 2, wherein at least two dummy lead wires are arranged in said semiconductor device and the tip portions of two

adjacent dummy lead wires are connected to each other.

10. The semiconductor device according to claim 3,
wherein said dummy lead wire is arranged in a large
space having at least twice the minimum pitch of the
arrangement of said lead wires.

11. The semiconductor device according to claim 3,
wherein at least two dummy lead wires are arranged in
said semiconductor device and the tip portions of two
adjacent dummy lead wires are connected to each other.

12. The semiconductor device according to claim 3,
wherein said dummy lead wires are formed in two sides,
which face each other, of said semiconductor element,
and the tip portions of the dummy lead wires positioned
to face each other are connected to each other.

13. The semiconductor device according to claim 3,
wherein said semiconductor element includes a dummy
connection electrode that is not electrically connected
to an internal circuit, and the tip of said dummy lead
wire is connected to said dummy connection electrode.

14. The semiconductor device according to claim 4,
wherein at least two dummy lead wires are arranged in
said semiconductor device and the tip portions of two
adjacent dummy lead wires are connected to each other.

15. The semiconductor device according to claim 4,
wherein said dummy lead wires are formed in two sides,
which face each other, of said semiconductor element,
and the tip portions of the dummy lead wires positioned

to face each other are connected to each other.

16. The semiconductor device according to claim 4,
wherein said semiconductor element includes a dummy
connection electrode that is not electrically connected
5 to an internal circuit, and the tip of said dummy lead
wire is connected to said dummy connection electrode.

17. The semiconductor device according to claim 7,
wherein said dummy connection electrode is electrically
connected to a power source line or a ground line.

10 18. The semiconductor device according to claim 8,
wherein at least two dummy lead wires are arranged in
said semiconductor device and the tip portions of two
adjacent dummy lead wires are connected to each other.

15 19. The semiconductor device according to claim 8,
wherein said dummy lead wires are formed in two sides,
which face each other, of said semiconductor element,
and the tip portions of the dummy lead wires positioned
to face each other are connected to each other.

20 20. The semiconductor device according to claim 8,
wherein said semiconductor element includes a dummy
connection electrode that is not electrically connected
to an internal circuit, and the tip of said dummy lead
wire is connected to said dummy connection electrode.

25 21. The semiconductor device according to
claim 10, wherein at least two dummy lead wires are
arranged in said semiconductor device and the tip
portions of two adjacent dummy lead wires are connected

00740902 123400

to each other.

22. The semiconductor device according to claim 10, wherein said dummy lead wires are formed in two sides, which face each other, of said semiconductor element, and the tip portions of the dummy lead wires positioned to face each other are connected to each other.

23. The semiconductor device according to claim 10, wherein said semiconductor element includes a dummy connection electrode that is not electrically connected to an internal circuit, and the tip of said dummy lead wire is connected to said dummy connection electrode.

24. The semiconductor device according to claim 13, wherein said dummy connection electrode is electrically connected to a power source line or a ground line.

25. The semiconductor device according to claim 16, wherein said dummy connection electrode is electrically connected to a power source line or a ground line.

26. The semiconductor device according to claim 20, wherein said dummy connection electrode is electrically connected to a power source line or a ground line.

27. The semiconductor device according to claim 23, wherein said dummy connection electrode

007406900 422400

[REDACTED]